

ABSTRACT OF THE DISCLOSURE

Visible and infra-red spectral filters based on arrays of uncoupled identical waveguides having coherently modulated cross sections offer many unique advantages, such as independence of the spectral position of the Bragg-resonance based transmission or reflection features on the angle of light incidence. The resulting spectral filters are mechanically and optically stable, do not degrade over time, and offer superior transmittance for use as band pass, narrow band pass, band blocking, short pass and long pass filters. Such filters are useful for a wide variety of applications including but not limited to biomedical analysis systems, spectroscopy and optical communications systems.